



PO BOX 202501
HELENA MT 59620-2501
www.metnet.state.mt.us
(406) 444-3680
888-231-9393

Linda McCulloch
Superintendent

E-Rate Technology Plan Samples 2001-2004

The technology plan samples included in this document are excerpted from E-Rate technology plans submitted to the Office of Public Instruction and reviewed in April 2001. The reviewers identified the exemplary plans from which the samples below were excerpted.

Thank you to the following districts for their willingness to share sections from their technology plans: Anderson School, Cascade Public Schools, Florence-Carlton K-12 Schools, Hamilton K-12 Schools, Hellgate Elementary School, Lewistown Public Schools, Red Lodge Public Schools, Somers Elementary, and Sun River Valley Elementary.

Samples are included for each of the five technology plan criteria established by the Schools and Library Division for E-Rate technology plans. Embedded within these samples is information that illustrates that the plan is more than a documentation of current practice. Projections for future years are included in the goals, professional development plans, and assessment of telecommunication services, budget and evaluation processes.

E-Rate Technology Plan Criteria

- ✓ The plan establishes **clear goals** and a realistic strategy for using telecommunications and information technology to improve education or library services.
- ✓ The plan has a **professional development strategy** to ensure that staff knows how to use the new technologies to improve education or library services.
- ✓ The plan includes an **assessment of the telecommunication services**, hardware, software and other services that will be needed to improve education or library services.
- ✓ The plan provides for a **sufficient budget** to acquire and support the non-discounted elements of the plan: the hardware, software, professional development, and other services that will be needed to implement the strategy.
- ✓ The plan includes an **evaluation process** that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.

Clear Goals

Samples from: Florence-Carlton K-12 Schools
Cascade Public Schools

Sample

Florence-Carlton K-12 Schools

¹National Educational Technology Goals

Goal 1: All students and teachers will have access to information technology in their classrooms, schools, communities and homes.

We should ensure sustained and predictable funding for technology; ensure that technology plans reflect the educational needs of students and are regularly updated; improve the affordability, reliability and ease of use of educational technology; ensure that school buildings and facilities are modern; strengthen our commitment to eliminating the digital divide; and ensure that all students have equal opportunities to access and use technology.

Goal 2: All teachers will use technology effectively to help students achieve high academic standards. Ensuring that the nation has effective 21st-century teachers requires more than just providing sufficient access to technology for teaching and learning. We should improve the preparation of new teachers, including their knowledge of how to use technology for effective teaching and learning; increase the quantity, quality and coherence of technology-focused activities aimed at the professional development of teachers; and, improve the instructional support available to teachers who use technology.

Goal 3: All students will have technology and information literacy skills. To ensure that students are prepared for their future we should: include technology and information literacy in state and local standards for what students should know and be able to do; ensure students use technology appropriately and responsibly; develop new student assessment tools; and strengthen partnerships with industry to help meet the workforce needs of the future.

Goal 4: Research and evaluation will improve the next generation of technology applications for teaching and learning. To ensure that research and evaluation will improve the next generation of technology applications for teaching and learning, we should: initiate a systematic agenda of research and evaluation on technology applications for teaching and learning; encourage state and local evaluations of technology programs; and support the dissemination and use of research-based information to improve teaching and learning.

¹ eLearning: Putting a World-Class Education at the Fingertips of All Children, 12/15/2000, by Dept. of Education found at: <http://www.ed.gov/Technology/elearning/index.html> - These 5 new goals replace 4 Pillar goals of 1996.

Sample

Goal 5: Digital content and networked applications will transform teaching and learning. To ensure that digital content and networked applications will transform teaching and learning, we should: ensure administrators and policymakers are technologically literate; support efforts to increase our understanding of how to improve teaching and learning through partnerships within and across sectors; identify leadership opportunities provided by technology to offer better ways of accomplishing educational goals; continue and expand efforts to digitize rich educational materials consistent with copyright laws; encourage the aggregation of demand for resources and services to attract better and more effective technology-based services for teaching and learning; support educators and technologists in defining what digital content and networked applications should be available to support teaching and learning; remove barriers to purchasing digital content and networked applications; recognize developers of high-quality digital content and networked applications and exemplary adoption of educational technologies; and support the integration of digital content and networked applications into state and local standards and curricular frameworks.

(2) Student Learning

FCS Measure of Excellence for Students (Student Learning Goals)

- 1) Students will attain a proficient technology skill set that supports curricula.
 - See benchmarks for grades 6, 8 and 12 in Appendix A
- 2) Students will use and apply technological skills to conduct research, manage information and solve problems.
- 3) Students will gain new understandings by using technology to analyze, synthesize and evaluate.
- 4) Students will use a variety of appropriate media and formats to communicate information and ideas effectively to multiple audiences.
- 5) Students will exhibit responsible technological behaviors.
 - Privacy of information on internet, email and chats
 - Respectful use of hardware and software
 - Moral and ethical use of multimedia objects and software (copyrights)
- 6) Students will create and update electronic portfolios of their original work annually.

²Information Literacy Skills

Technology skills are only a first step in assuring all our children become proficient information and technology users. Also necessary are information literacy skills such as:

————— **Sample**

- **Task definition**—The first step in the information problem-solving process is to recognize that an information need exists, to define the problem, and to identify the types and information needed.
- **Information seeking strategies**—Once the information problem has been formulated, the student must consider all possible information sources and develop a plan for searching.
- **Location and access**—After students determine their priorities for information seeking, they must locate information from a variety of resources and access specific information found within individual resources.
- **Use of information**—After finding potentially useful resources, students must engage (read, view, listen) the information to determine its relevance and then extract the relevant information.
- **Synthesis**—Students must organize and communicate the results of the information problem-solving effort.
- **Evaluation**—Evaluation focuses on how well the product meets the original task (effectiveness) and the process of how well students carried out the problem-solving process (efficiency).

²eLearning: Putting a World-Class Education at the Fingertips of All Children, 12/15/2000, by Dept. of Education found at: <http://www.ed.gov/Technology/elearning/index.html>

STUDENT LEARNING STRATEGIES

General Student Learning Strategy:

- Experiment with a variety of collaborative models for the Technology Educator and classroom teachers to integrate technology instruction.
 - Weekly schedule, grades 1-6, 1st and 2nd Quarters
 - Block schedule, grades 1-8, ten consecutive days per grade level using technology to support interdisciplinary units/grade-level projects
 - Grades 9-12 open dialog, assess needs, and develop strategies for collaboration

Strategies Implementing Measure of Excellence:

(Goal 1.1) Define an initial skill set by spring 2001, using the Montana Standards for Technology as a guideline. Continually refine technology skill set for 6th, 8th and 12th grade benchmarks yearly.

Students will attain mastery of a defined skill set for each grade level. Skill sets will build upon each other as students' progress through grade levels. This set of skills will provide essential tools for students to apply software to assisted as well as independently developed projects.

(Goal 1.2) Include activities and experiences for students to meet these standards in specific classroom curriculum areas.

Students will use the skills learned in the lab to complete assignments for the regular classroom. Reports, based on the curriculum that previously would have been created with pencil and paper, will be developed digitally. Classroom Teacher and Technology Educator will work collaboratively to ensure projects meet criteria in both areas.

Sample

- (Goal 1.3) Demonstrate the process of creating a project that is related to a curriculum topic.
Students in grades 5 and above will be able to independently determine the best software application to complete an assigned project. Students will use multiple applications to create a single project.
- (Goal 1.4) Require students to present their work to the class and parents at least once per year.
- (Goal 1.5) All students/parents will sign an acceptable use policy to use our technology system.
The Technology Coordinator will keep these signed policies on file.
Students will share and present their work with their class on a consistent basis at the completion of digital projects. Parents will be invited to the school to view classroom technology projects at least once a year.
- (Goal 1.5) The Technology Educator will develop an Internet safety plan, present it to students and put it in a pamphlet. The Technology Coordinator will put it on Florence-Carlton web page.
- (Goal 1.6) Define student electronic portfolio content and guidelines to create and maintain them. Portfolios will show the students' creativity and proficiency in the Montana Standards for Technology.
- Purpose: assessment tool for teachers, evaluation tool for technology plan and grants, to empower students to take responsibility for their own learning
 - Balance teacher criteria with student choice
- (Goal 1.6) Identify one or two pilot groups to begin building electronic portfolios.

(2) EVALUATION OF STUDENT LEARNING

- Develop proficiency skill set test for students.
- Require all students to show proficiency in our district's version of The Montana Standards for Technology.
- Yearly, reassess the lab scheduling of the 7-12 computer lab to see if it effectively meets Florence Carlton School's technology goals and teachers' goals.
- Yearly, reassess the lab scheduling of the K-6 computer lab to see if it effectively meets Florence Carlton School's technology goals and teachers' goals.
- Develop a plan to effectively use the student portfolios to evaluate higher-order thinking and technology skills.

Sample

Cascade Public Schools

Activities / Timeline (P=Primary, M=Middle, H=High)	Present	2001-2002	2002-2003	2003-2004
Objective a. – Establish opportunities for students to become producers as well as consumers of information.				
P- Videos and CD-ROM-used for science/ social studies themes	Continue	Expand	Expand	Expand
P- Create student/teacher videos for home guidance (ex. Reading skills, communication skills)			Pilot	Expand
P- Student created thematic videos (ex. Fairy tale re-enactments)			Pilot	Expand
P- All 4 th grade students will use scanner to enhance final reports (ex. State reports)	Pilot	Continue	Expand	Expand
P- Class designed web pages featuring student work, class assignments, upcoming events			Pilot	Expand
P- Students/teachers use digital cameras and videos/sound to create independent projects (ex. Space, volcanoes, experiments)	Continue	Expand	Expand	Continue
M- Research local graveyard statistics and correlate data with historical events	Continue	Continue	Continue	Continue
M- Monthly collection and analysis of Middle School attendance data	Pilot	Continue	Continue	Continue
M- Research local sites following Lewis and Clark expedition		Pilot	Continue	Continue
M- 5 th grade teams create educational web-pages		Pilot	Continue	Continue
M- Students improve their skills at taking electronic notes while they do research on the internet	Pilot	Expand	Expand	Continue
H- Computer Literacy class projects		Pilot	Expand	Continue
H- Riparian Monitoring Program (see Appendix C-1)		Pilot	Expand	Continue
H- Classroom Without Walls (see Appendix C-2)			Pilot	Continue
H- Cascade Community Heritage Project (see Appendix C-3)		Pilot	Continue	Continue
H- Voices from the Past – Bannack Ghost Town Project (See Appendix C-4)			Pilot	Continue
P, M, H- Seek out opportunities to add new projects similar in scope to the four listed immediately above	Pilot	Pilot	Pilot	Continue

Sample

C. Community Outreach and Partnerships

GOALS

To maximize community technology use creating partnerships throughout the community.

OBJECTIVES

a. To create partnerships with outside agencies.

- By working together with a variety of government agencies, schools, and businesses, we will be able to share valuable resources and information, provide additional funding for project-based programs and create several “real-world” applications of the curriculum. Examples of project based education programs are found in Appendix C.

b. To develop the virtual school.

- Using the power of the Internet, the Virtual School will provide the students, staff and community members of Cascade the ability to access and submit information concerning the many educational programs, extra-curricular activities, and educational opportunities offered.

c. To provide opportunities in adult-based learning.

- Several programs have been implemented. These programs provide adults the opportunity to attend classes for OPI/college credit, receive computer related training or use the technological resources available in the district. We would like to expand the number of opportunities available.

ACTIVITIES/TIMELINE

b. To develop the virtual school.				
Teacher lesson plans on the internet.		Pilot	Expand	Continue
Provide electronic mail accounts for faculty		Pilot	Expand	Continue
Provide teacher designed resource web sites for students		Pilot	Expand	Continue
Teacher Class Schedule on the internet.		Pilot	Expand	Continue
Virtual Activities Schedule and Lunch Menu		Pilot	Expand	Continue
Administrative Newsletters on the internet.		Pilot	Expand	Continue
Investigate Opportunities For Cisco Based Training		Pilot	Pilot	Continue
c. To provide opportunities in adult-based learning.				
GED Program		Pilot	Expand	Expand
Extended Library / media center hours.	Pilot	Expand	Continue	Continue
Community Internet Lab hours.		Pilot	Continue	Continue
Expand college credit courses.		Pilot	Expand	Expand
Expand adult computer-training courses	Continue	Continue	Continue	Continue

Sample

D. Technology Infrastructure

GOALS

To provide the necessary technology and infrastructure to support the educational programs found throughout the district.

OBJECTIVES

a. To provide computer workstations in labs, classrooms and offices for student's faculty, and administrative use.

- Sustain current facilities of student labs
- Update Business Lab for Networking Stability
- Add Elementary Computer Lab
- Provide multiple PC computer workstations to every classroom.
- Provide a computer workstation for every office.

b. To design and implement a computer workstation rotation program.

Design a replacement and rotation plan for workstations. Look to auction or give away old equipment that is no longer usable.

Professional Development Strategy

Samples from: Hamilton Public Schools

Sun River Valley Elementary

Hamilton Public Schools

Appendix D: District action for - Goal 4: To develop teacher skills in technology.

1. Develop staff technology expectations, incentives and accountability measures
 1. The administration will develop Staff expectations that will include technical skills equivalent to the Hamilton High School Graduation portfolio requirements in technology and minimally consistent with the Montana Technology Standards. Specific examples of expectations include:
 1. communicate with other staff, professionals, students, authors, scientists and others using online services and e-mail
 2. enhance student learning and staff development by working individually and in cooperative groups to produce quality products (e.g. multimedia presentations, classroom & P.R. materials)
 3. access information for research activities from a variety of on and off-site information services
 4. In addition, by the end of the 2001-2002 school year, teachers will be asked to
 1. develop lessons in relation to district, school and class objectives, customize lessons for individuals and small groups of students and provide for simulations, cooperative learning activities, distance learning, research assistance for classes when appropriate

Sample

2. maintain, report and use student, school and district information (e.g. student assessment, district financial information) to improve instruction, decision-making and planning.
 3. Develop and implement opportunities for students to learn technical skills toward their standards and gather portfolio evidence of those skills during class time.
2. Continue to develop and maintain Teacher incentives to encourage technology competence including:
 1. Workshop and seminar attendance.
 2. Release time for technology curriculum development.
 3. Stipends for teaching courses or Technology Academy seminars.
 4. Equipment priorities for teachers meeting and exceeding new teacher 'Technology Standard', including newer technology and priorities for laptop requests.
 5. Equivalent 'Graduate Credit' given for local courses for lane change movement on Teacher salary schedule.
3. Insist on accountability measures including:
 1. Asking teachers to develop evidence of technological skills and proficiency in a professional portfolio
 2. Require teachers to meet and demonstrate proficiency in Montana and District Technology Standards as a part of their evaluated Professional Standards for Teaching in Hamilton (District Teacher Evaluation Procedures).
2. Plan for and deliver specific staff development activities and training in the area of technology
 1. Technology Academy
 2. Summer Technology Courses for teachers
 3. College Credit Courses offered on campus
 4. Weekly/Monthly Technology Mentoring Sessions
 5. Technology Workshops
 6. Masters Level program(s) offered on our district campus
 7. State and Regional Computer Conferences
 8. Ongoing needs assessment
 9. Technology Rubrics development through the curriculum committee
 10. Move from volunteer expectations in technology to mandatory expectations
 11. Tech Academy - by teachers for teachers
 12. Evening Teacher courses
 13. Adult education courses
 14. After school workshops by Technology Coordinator and Specialists
 15. 'Early out' school day workshops
 16. Pre-service and In-service seminars, speakers
 17. Teacher & teacher team attendance at
 1. NCCE Conference
 2. MT ETC meetings
 3. MT Tech Conference
 4. School Master workshops

Sample

5. Workshops for specific Software (e.g. Powerpoint)
 6. Teacher Technology Mentor Program
 7. University Programs
 8. On Campus courses
 9. Extension courses in Hamilton
 10. On-line courses
 11. Hamilton based Master's in Technology program
 12. Novell, Microsoft, Cisco, HP certification training classes for Technology Coordinator and Specialists
 13. Establishing Teacher Troubleshooting Teams in each Building to be 'first responders' to fix technology snafu's.
 3. Ask teachers to develop evidence of technological skills and proficiency in a professional portfolio
 1. By May of 2001, administrators and teachers who are members of the executive committee and building representatives will develop, pilot and model individual professional portfolios of technological skills and proficiencies.
 2. By May of 2002, all teachers will be required to develop and maintain professional portfolios with evidence of their own technological skills and proficiencies meeting District Professional Technical Standards.
 4. Require teachers to meet and demonstrate proficiency in Montana and District Technology Standards as a part of their evaluated Professional Standards for Teaching in Hamilton (District Teacher Evaluation Procedures).
 1. In the Fall of 2002, have the Board adopt additional professional standards for teaching that include proficiency in Montana and District Technology Standards.
 2. Require administrators to evaluate teachers to those new standards.
-

Sun River Valley Elementary

V. Staff Development

A. Objectives

1. Provide teachers, administrators, and school library media personnel with on-going training on the use of technology and methods of integrating technology into instruction.
2. A mentoring program will be established and maintained whereas staff members with technological expertise are matched with those with less expertise.
3. A Technology Coordinator will be hired and trained to facilitate the implementation of the Technology Plan.
4. 100% of staff will have access to computers at home.

B. Current Status

1. Positives

Sample

- Staff is open to the integration of technology in the curriculum.
- 50% of staff members have computers at home.
- 100% of the staff has experience with e-mail.
- All teachers in the middle school use the Internet for research.
- ALL teachers have received training on the Internet and using multimedia software.
- Staff is encouraged to take computers home over the summer to use and practice skills learned in classes.
- Microsoft Office used throughout the system. All staff has been trained to promote continuity.
- We have labs available to implementation new skills acquired at summer workshops or institutes.
- Teachers use list serves and websites for supplementary lesson plans.
- All staff is not afraid to implement technology in new ways.

2. Negatives

- Most staff is aware of the potential of technology, but lack time to become proficient in its use.
- On-going professional development is needed to provide staff members with training on current technologies.
- We have no current staff-training plan; no funding is available.
- Teachers lack release time for attending technology workshops or time to plan technology lesson and practice those skills.

C. Strategies

1. Provide teachers, administrators, and school library media personnel with on-going training on the use of technology and methods of integrating technology into instruction.

- Sources of ongoing technological training and technical assistance will be disseminated to staff members. Staff members will be encouraged and supported in their attendance. Those that always have a technological component include:
 - a. Annual Teton County Educator Days
 - b. Annual golden Triangle Curriculum Cooperative Summer Institutes
 - c. Annual Title I, II, IV, and VI Conferences
 - d. Annual MEA Convention
 - e. Northwest Conference for Computer Educators Annual Conference
 - f. Montana University System Summer Offerings
 - g. MT Association of Elementary Principals Annual Conference
 - h. Association of Gifted and Talented educators Annual Conference
 - i. Council for Exceptional Children Annual Conference
 - j. Courses offered by Great Falls Public Library
 - k. 3Rivers Telephone COOP workshops

Sample

2. Workshops offered by professional groups such as MCTM, MCCE, TEAM, MMASS, and MSTA
 - a. Western Education Technology Round-up
 - b. Others as we are made aware.
3. A mentoring program will be established and maintained where staff members with technological expertise are matched with those with less expertise.
 - Using the assessment information gathered for staff development, teachers will be matched for the purpose of sharing expertise.
 - Each week, time will be set-aside for matched teachers to work together for at least an hour. This time can be spent on troubleshooting, application of new knowledge, on planning for the use of technology with the curriculum, for previewing software, for identifying appropriate Internet sites, etc.
4. A Technology Coordinator will be hired and trained to facilitate the implementation of the Technology Plan.

The Technology Coordinator will:

 - Assist with the development of the Technological staff development plan.
 - Provide technical support to any staff members requesting assistance.
 - Act as a resource to students, staff and community members.
 - Attend training that will provide him/her with more expertise in network management, troubleshooting, software application, etc.
 - Attend at least one national or regional technology conference.
5. 100% of staff will have access to computers at home.
 - Staff may check out computers for the summer for their own personal use.
 - Staff will use these computers for implementing new learning from workshops, research at home, and classroom administrative duties.

D. Evaluation

1. Provide teachers, administrators, and school library media personnel with on-going training on the use of technology and methods of integrating technology into instruction.
 - An evaluation form will be completed by each participating teacher after each in-service opportunity. The teacher will be asked to identify the strengths and weaknesses of the training; how he/she will apply the information in the future; and what impact the training will have on student learning. The evaluation form will be a guide for future in-service training.

Sample

- Staff members will be asked to keep a time log of their use of the Internet and topics covered by in-service. These logs will be used to determine if there is an increase in usage after the corresponding in-service.
2. A mentoring program will be established where staff members with technological expertise are matched with those with less expertise.
 - Staff members will be asked to keep a log that details how the mentoring time was spent and how it was used to enhance instruction.
 - At the end of each semester, staff members will complete a survey that details the effectiveness of the mentoring program.
 3. A Technology Coordinator will be hired and trained to facilitate the implementation of the Technology Plan.

The Technology Coordinator will:

- Record maintenance of hardware.
 - Compile results of workshop evaluations.
 - Be evaluated by administrative personnel.
4. 100% of staff has access to computers at home.
 - Yearly staff survey will evaluate the number of computers in use.

Assessment of the Telecommunication Services

Sample from: Red Lodge Public Schools

Red Lodge Public Schools **Three Year Needs**

After district wide goals were established, and the baseline surveys and inventories were evaluated, needs in the areas of infrastructure and professional development were detailed for the next three years.

The committee found several notable strong points in the district's technology to date. These are areas or strengths that have been targeted in the past. The committee was pleased with these efforts and expressed support for their continuation indefinitely. They are needed for a truly integrated technology program.

1. The employment of a Technology Coordinator whose purpose is to troubleshoot and assist with all facets of technology on a daily basis. Thus leaving teachers to teach and not be computer experts.
2. Internet and Ethernet Network services in every classroom and office throughout the district. (for needs on Internet speeds see Year 1 below).

Sample

3. Deep commitment by the school board, administration, teacher's union, parent committees and community in general in support of technology and technology professional development within the district.
4. Willingness of teacher, administrators and the Technology Coordinator to work together to make the educational experience work with what limited resources we have and to work together for the common good.
5. Dual computer labs for student use in the High School. With 90% utilization throughout the school day.

Working from these achievements, the committee focused on the needs over the next three years. Recurring points that were hotly discussed where: Adequate replacement schedules of older hardware so that every teacher can take advantages of new technology developments, adequate training on a timely basis that does not require teachers to give up limited personal time without compensation, and the need for technology at all levels from Pre-school Programs to Adult Education Classes in the evenings. Also discussed was the traditional emphasis of the Red Lodge School District on the Macintosh platform of computers. The committee and community felt that a gradual shift towards a more mix environment of Macs and PCs was in order to best prepare student for life and continuing education after High School.

To meet our stated goals and fill in the weaknesses identified the following three-year plan was constructed. Each of the needs is listed below with its driving goal.

Year 1 (2000 - 2001 School Year)

Need	Category	Goal driving the need.
Upgrade Internet line service from 56k to T1. 56k line too slow for classroom or computer lab use rendering Internet useless for more than a handful at a time.	Infrastructure	Goal 1
Upgrade High School Computer Lab with 15 new PC computers to run software identified in the curriculum.	Infrastructure	Goal 1
Purchase laptops and voice recognition software for special needs students.	Special Need	Goal 1
Seek additional funding at both the local level, and at the state and federal grant level	Infrastructure	Goal 3
Purchase image-processing hardware for student/staff projects. Scanner and digital camera for Roosevelt middle school and Red Lodge High School	Infrastructure	Goal 1
Provide Professional Development for teachers on the areas specified as needs on the teacher skills survey results. (Appendix D)	Professional Development	Goal 2
Recycle all available PCs from the High School Lab to the Middle School Lab	Infrastructure	Goal 1

Sample

Year 2 (2001-2002 School Year)

Need	Category	Goal driving the need.
Upgrade Elementary workstations to modern standards (18 workstations)	Infrastructure	Goal 1
Upgrade all network hubs and routers to 100Mbps Ethernet	Infrastructure	Goal 1
Purchase presentation hardware and software for presentations of student work by students.	Infrastructure	Goal 1
Install a video distribution network to all classrooms centered from the district libraries.	Infrastructure	Goal 1
Provide Professional Development for teachers on the areas specified as needs on the teacher skills survey results for that year.	Professional Development	Goal 2
Internet Proxy Server and Filter as may be required by Federal Law.	Infrastructure	Goal 1
Purchase upgrades for district wide licenses of application software as well as networking and system software.	Infrastructure	Goal 1
Seek additional funding at both local level and at the state and federal grant level	Funding	Goal 3

Year 3 (2002 - 2003 School Year)

Upgrade High School Mac Computer Lab to modern workstations (20 workstations)	Infrastructure	Goal 1
Upgrade Roosevelt Middle School Research Lab to modern standards (15 workstations)	Infrastructure	Goal 1
Purchase upgrades for district wide licenses of application software as well as networking and system software.	Infrastructure	Goal 1
Provide Professional Development for teachers on the areas specified as needs on the teacher skills survey results for that year.	Professional Development	Goal 2
Seek additional funding at both local level and at the state and federal grant level	Funding	Goal 3

Sample

Sufficient Budget

Samples from: Lewistown Public Schools
Anderson Elementary

Lewistown Public Schools**GOAL 3: ENHANCE THE QUALITY OF INSTRUCTION BY INCORPORATING ELECTRONIC INFORMATION RESOURCES.**

Strategy Students, staff and community will be able to access analyze, process, and disseminate shared resources

including CD towers and Internet. Technology specialist will annually maintain and update wireless

WAN to provide intra-building communications and resource sharing. Administrators will continue to

encourage staff use of voice mail, as provided by the local newspaper.

	IMPLEMENTATION	Cost Considerations	COST ESTIMATION				FUNDING SOURCE
			00-01	01-02	02-03	03-04	
3.1	Maintain / update Broadband internet service	\$1599 / Month	19200	19200	19200	19200	Gen Fund / E-Rate
3.2	Maintain Internet filtering software	Current product is cyber Patrol X 2 servers	3000	3000	3000	3000	Gen. Fund
3.3	Update both online and network periodical and research databases.	\$80 – LRS. \$1350 SIRS, \$500 SIRS Gov. \$150 Infotrac. \$800 facts on File	2880	2880	2880	2880	Gen. Fund
3.4	Provide current multimedia reference CD ROMs including encyclopedia, atlas and dictionaries.	15 copies district wide / \$40	600	600	600	600	Gen. Fund
3.5	Maintain Follett library software	Annual maintenance contracts at each building	2000	2000	2000	2000	Follett

Progress towards this goal will be measured by: Comparative data analysis of annual technology survey.

Sample

Anderson Elementary School

Funding Sources 2001-2002

Consolidated ESEA Funds

Fund	Amount	School Improvement Usage	Area
Title I	\$360	Aide salary- Program utilizes <i>Reading Plus</i> software for assessment and instruction	Reading
Title II	\$ 630 \$ 240	Staff Training for School Improvement	Seattle Conference on school improvement Purchase of <i>The Brain and How it Works</i> for teacher-lead study
Reduced Class Size	\$2100	Staff Development and Training on Brain Research and Learning	ASCD Conference Brain research and Technology Sessions
Gifted and Talented	\$500	Materials Training	G/T Conference, Boise, ID
Keystone Grant	\$1000 \$ 300 \$ 600	Staff Training Staff Training Staff Training	Science & Technology
Timber Harvest	\$7000	Hardware Wired and networked library Apple share	Technology Committee

Sample

District and Other Funds

Fund / Source	Amount	School Improvement Usage	Area
General Fund	\$2500 \$4000	Networking building Wiring Hubs Ethernet Cards Consultation Software File Server Hardware Software-Library Training	Technology Committee and Volunteers
Anderson Community Council (fundraising)	\$1600 \$5300	Computer Scientific Calculators Peripherals Tape recorders Wiring and hubs for networking the building	Media Specialist Middle School Math Class Networking the building- Technology Committee
Anonymous Donation	\$8800 \$2000	Hardware – computers and peripherals Hardware – computer and peripherals	Technology Committee Technology Committee
Burns Telecommunication Center	MSU grant for training teachers	Training and Development for teachers -ATT Grant	
Volunteer Labor	No cost	Wired the building for networking	Nine volunteers from school and community. (2 days+)
Western Education, Inc.	\$2500 (Grant)	Reading Plus	

Evaluation Process

Samples from: Hellgate Elementary
Somers Elementary

Hellgate Elementary

The Evaluation process has four major components: staff assessment, student assessment, technology review and technology plan review.

Sample

Staff assessment:

Staff assessment is currently based on a self-assessment instrument derived from a similar instrument developed by library media specialists and teachers of the Bellingham Public Schools. It is based upon the *Mankato Scale*, first developed by the Mankato (Minnesota) Public Schools to measure the growth of student technology skills. The instrument was administered in fall 1999 and again in January 2001. For completeness, we will administer this instrument again at the end of the staff development program for the years 2001-2004.

At this time we realize, the limitations of the instrument in use, and we are developing another instrument that will better serve our needs. This will be administered at the start and again at the end of the staff development program (2001-2004).

Student assessment:

Hellgate has not previously deployed any formal student assessments. However, with the development of student competencies in technology, we will begin formal assessments. We are currently developing district competency standards that will meet the state standards. We intend to incorporate elements of the comprehensive ISTE standards. Methods of assessment are still under consideration by our technology curriculum committee.

Technology Review:

The technology deployed at Hellgate undergoes continual monitoring and review. The technology department oversees this review, but all staff members contribute. Factors considered are: (1) effectiveness/limitations of the technology, (2) useful life expectancy, (3) new developments in technology, (4) needs of the user community and (5) availability of the technology (do we have adequate deployment?). At the end of each school year, a concerted effort is made to replenish and replace software, equipment and infrastructure that has reached end of life. At this time, we try to anticipate the technology that should be deployed before the start of the next school year.

Technology Plan Review:

The Hellgate Technology Plan will be formally reviewed on an annual basis by the technology planning committees in each building. It will also be reviewed by the district technology planning committee and the technology director. The efficacy of the existing plan will be evaluated, and the plan will be modified to correct shortcomings and to reflect changes recommended and agreed upon by the various reviewers.

Somers Elementary

Evaluation of the effectiveness of a technology plan is an ongoing process. We will use both informal and formal components to measure the effectiveness of our plan. Throughout each phase of programming we will conduct several informal conversations with students, parents, and district personnel, to address their perceptions of the implementation of additional technologies into the District's learning environment. A formal evaluation of the technology plan and its implementation will be accomplished using the forms found in the Appendices (*OPI comment: information from the appendices are not included in this sample document*).

Sample

- Appendix A Technology Professional Workshop Evaluation
(Completed after every workshop)
 - Appendix B Technology Professional Needs Survey
(Completed semi-annually)
 - Appendix C Technology Skills Self Assessment
(Completed at user's discretion)
 - Appendix D Technology Plan Evaluation
(Completed annually)
-

Sample